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one of a calcium bioceramic inorganic material, inorganic salts with solubility and biocompatibility, or soluble organic substances.

12. The method according to claim 9, further comprising a step of

thermal polymerisation or solidification or thermal sintering of said biomaterial.

13. The method according to claim 9, further comprising a step of adding radiopaque materials to said biomaterial.

14. The method according to claim 9, further comprising a step of adding chemical active ingredients comprising drugs to said biomaterial.

15. The method according to claim 14, wherein said adding step comprises introducing said active ingredients in solid powder form.

16. The method according to claim 14, wherein said adding step comprises introducing said active ingredients in aqueous solution.

17. The biomaterial of claim 3, further comprising polysaccharides comprising lactose, and carbohydrates comprising amides.

18. The method of claim 11, further comprising polysaccharides comprising lactose, and carbohydrates comprising amides.

19. A composite biocompatible biomaterial, useable as a drug delivery system, a spacer or a bone substitute, comprising:

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a structural matrix component consisting of polymethyl methacrylate;

a soluble component consisting of tricalcium phosphate, wherein the structural matrix component includes canaliculi having a dimension of smaller than 100 microns and partially housing the soluble component, and wherein the structural matrix component and the soluble component comprises a moisture content between 1 and 50% w/w; and

a radiopaque material;

wherein said tricalcium phosphate comprises both powder and granules, wherein said tricalcium phosphate powder has a dimension smaller than 100 microns, and wherein said tricalcium phosphate powder dissolves when contacted with a liquid to form empty spaces which constitute a porosity formed by microcavities with dimensions smaller than 100 microns, and wherein said tricalcium phosphate granules have dimensions between 200 and 500 microns and wherein said tricalcium phosphate granules dissolve when contacted with a liquid to form empty spaces which constitute a porosity formed by macrocavities with dimensions between 200 and 500 microns, to impart mechanical support characteristics and osteoinductive and osteoconductive characteristics in the entire volume occupied by said biomaterial.

20. The composite biocompatible biomaterial of claim 19, further comprising at least one chemically active ingredient.

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